**Steven Everet**

+1 (213) 260-4223 | frelans78@gmail.com

Date: 02/11/2024

To:

James

# Project Quote: 48-Hour Automatic Sample System with RFID and Rotary Encoder Integration

## Project Summary

This quote outlines the estimated costs for designing, developing, testing, and deploying an automated sample tracking system. The system will use an RFID read/write module and a Turck IO-Link rotary encoder integrated with a Productivity PLC. This system will automate the storage and retrieval of sample data and synchronize the carousel rotation.

## Project Components and Costs

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| Item | Description | Cost (USD) |
| System Design & Configuration | System architecture, configuration of IO-Link Master, and memory mapping for RFID data fields. | $400 |
| RFID Write/Erase Routine | Development of routines to erase, write, and verify RFID tag data. | $300 |
| RFID Read Routine | Creation of routines to detect tag entry/exit, read permanent tag ID, and validate written data. | $300 |
| Rotary Encoder Routine | Encoder data translation for accurate position tracking within Productivity Suite ladder logic. | $300 |
| Diagnostics & Error Handling | Setup of error reporting, diagnostic routines, and event logging for system monitoring. | $200 |
| Testing & Validation | In-depth system testing, validation of routines, and 48-hour sample cycle simulation. | $300 |
| Remote Debugging | Support for on-site testing and adjustments through remote access. | $200 |
| Documentation & Handover | Full documentation, user manuals, and final training session with the client team. | $200 |

Total: $2,200

## Project Timeline

Estimated project completion time: 2 weeks, detailed as follows:  
- Week 1: System Design & Configuration and development of RFID Write/Erase and Read Routines  
- Week 2: Development of Rotary Encoder Routine, Diagnostics, and Error Handling and Testing, Validation, Remote Debugging, and Final Documentation

**Payment Terms**

1. 30% down payment

2. System Design & Configuration and development of RFID Write/Erase and Read Routines  
: 35%.

3. Development of Rotary Encoder Routine, Diagnostics, and Error Handling and Testing, Validation, Remote Debugging, and Final Documentation : 35%

**Payment Terms**

Card, Bank , Payoneer